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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,199	06/25/2001	Ernett Altheimer	ALTE117421	9897

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EXAMINER

ALVO, MARC S

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 12/02/2002



Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/892,199

Examiner

St ve Alvo

Applicant(s)

ALTHEIMER ET AL.

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-- Th MAILING DATE of this communication app ars on the cover sheet with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over SINGH (text).

SINGH teaches Kraft pulping Arundo Donax and then bleaching the Kraft pulp with oxygen. The oxygen bleaching of SINGH is a TCF (totally chlorine free) bleaching process, as it does not use chlorine or chlorine dioxide. If necessary it would have been obvious that the pulp of SINGH has been subjected to a pulping process as Kraft pulping is a pulping process.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over SINGH or WO 99/66119 in view of CANADIAN PATENT 2,132,056 with or without WO 96/0943.

SINGH or WO 99/66119 teaches pulping Arundo Donax to form pulp and bleaching the pulp to brighten and whiten the pulp. CANADIAN PATENT 2,132,056 teaches TCF bleaching provides better environmental protection than either chlorine and/or chlorine dioxide (ECF) bleaching processes. It would have been obvious to the routineer to use any well-known TCF bleaching process, such as the bleaching sequences of CANADIAN PATENT 2,132,056, to provide better protection to the environment than the ECF bleaching sequence of WO 99/66119

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(see abstract and claims 21 and 31). Or obvious to include other bleaching stages, e.g. the TCF bleaching stages of CANADIAN PATENT 2,132,056, for the oxygen bleaching stage of SINGH to further brighten and whiten the pulp. Figure 1 of CANADIAN PATENT 2,132,056 teaches a Q-O/O-EOP-PPP bleaching sequence (Table 3). CANADIAN PATENT 2,132,056 further teaches that the Q-stage could follow the O-stage or be between two O-stages, see page 8, lines 15-30 and that the second oxygen stage could be an EOP stage, see paragraph bridging pages 5 and 6. Thus it would have been obvious to substitute O-EOP for the O/O stage of CANADIAN PATENT 2,132,056. It would also be obvious to start the sequence with and O-Q-O/O bleach sequence, see page 8, lines 15-30, and thus an O-QWO-EOP-PPP would have been obvious to the routineer. If this is not obvious then O-Q-P bleaching sequences would have been obvious from WO 96/09434. The Q stage is normally acidic. If this is not obvious from the CANADIAN PATENT, then such is taught by WO 96/09434, page 2, lines 26-37. It is noted that Applicant has claimed many TCF bleach sequences, which comprise the same basic stages as CANADIAN PATENT 2,132,056. The exact order of stages has not been shown to be critical. Are these TCF sequences conventional in the bleaching of pulp?

The argument that the Table of the SINGH text comes from the Robert et al article (supplied by Applicant) and discloses that the oxygen is a single stage of a multi-stage bleaching process, is not convincing as SINGH and Robert et al are comparing a single oxygen stage bleaching process to the conventional C-E bleaching process. The oxygen stage is one bleaching process and the CE stages are a conventional bleaching process. They are not stages in the same multistage bleaching process. See Robert et al, the paragraph bridging pages 49-50, where it is stated "...in the bleaching of kraft pulp (Table III) which the one-stage oxygen-caustic soda

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treatment was compared with a conventional two-stage treatment comprising chlorination and caustic soda.”

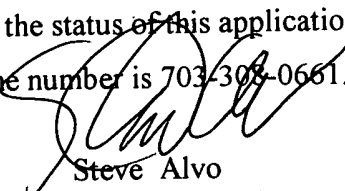
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 703-308-2048. The examiner can normally be reached on 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Steve Alvo
Primary Examiner
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